

Orientation Checklist

Nuclear Science Flight Path User Orientation

User Group/PI: _____ Experiment No. _____

Flight Path _____ Host _____

1. ADMINISTRATIVE

- a. Foreign Nationals
 - i. DIVA approvals complete
 - ii. Building access
 - iii. Sensitive countries checklist
- b. Electronics Usage
 - i. Computing and Personal Electronic forms
 - 1. Non-U.S. Government Owned Controlled Article Authorization, Form 1897
 - 2. LANL Visitor Network User Authorization, Form 1861
 - 3. On-Site Non-LANL But Government Owned Unclassified AIS, Form 1865
- c. Export Control and Proprietary Information
 - i. Work for Homeland Security, DoD, private companies
 - ii. Deemed exports
- d. Important phone numbers
 - i. Emergency 911
 - ii. Central Control Room (CCR) (505) 667-5729
 - iii. Radiation Control Techs (RCT) (505) 667-7069
 - iv. Flight Path _____
 - v. Data Room _____
 - vi. Other Phone #'s
 - 1. Flight Path Scientist _____
 - 2. Group Office (505) 667-5377
 - 3. Steve Wender (WNR Area Manager) (505) 667-1344 (office) / (505) 664-2185 (pager) / (505) 660-6458 (cell) / (505) 983-3634 (home)
 - 4. Paul Lewis (Lujan Area Manager) (505) 665-0932 (office) / (505) 664-5344 (pager)
 - 5. Ron Nelson (Deputy Group Leader) (505) 667-7107 (office) / (505) 664-2191 (pager)
 - 6. Leo Bitteker (Operations Team) (505) 667-0333 (office) / (505) 664-7996 (pager)
 - 7. Technician _____
 - vii. Making phone calls
 - 1. Use last 5 digits of LANL numbers for on-site calls (e.g. 7-xxxx)
 - 2. Dial 8 for outside line
- e. After Hours Access
 - i. Gate Operation
 - 1. Everyone must swipe badge for entry
 - 2. Push green button for exit, no need to wait for gate to close before pushing button
 - ii. Contact CCR for immediate assistance
- f. Restrooms

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- g. Eating
 - i. Location of cafeterias
 - ii. Designated eating areas
 - 1. No radioactive or other hazardous materials in eating areas
 - 2. No soldering permitted in eating areas
 - iii. Areas where food is not permitted
- h. Start Actual Run in User Office visitor database

2. SAFETY

- a. Safety Review Worksheet – Must be reviewed and approved prior to start of experiments
- b. Experiment Changes – require approval of Flight Path Scientist
- c. Minimum Training for Visiting Users (provided by LANSCE Training Office)

- i. Standard user training
 - 1. Course 39486 – TA-53 User Facility Specific Training
 - 2. Course 31744 – TA-53 Building Emergency Plan Program
- ii. Radiological Worker Training

For users needing access to ER2 only:

- 1. Course 15506 – General Employee Radiological Training

For external users needing unescorted access to Radiological Controlled Areas:

- 1. Course 24856 – TA-53 Radiological Worker Practical
- 2. Course 12909 – Radiological Worker Exam

For internal (LANL) users needing unescorted access to Radiological Controlled Areas:

- 1. Course 20301 – Radiological Worker II Classroom
- 2. Course 12910 – Radiological Worker Practical
- 3. Course 12909 – Radiological Worker Exam

For users working with chemicals or cryogenic fluids:

- iii. Course 25997 – Chemical Hazard Communication Introduction Training

iv. Other training requirements

- d. Radiation Control
 - i. Dosimetry requirements
 - 1. TLD
 - 2. PN-3
 - ii. Radiation levels
 - 1. Postings
 - 2. Do not linger near beam pipes
 - iii. Radioactive materials
 - 1. Inventory of user radioactive sources and parts
 - 2. All radioactive materials must be kept in a controlled area
 - 3. All radioactive materials must be properly labeled
 - iv. Transport of radioactive materials
 - 1. On-site – hand carry
 - 2. Off-site – require special shipping procedures and authorization
 - 3. Do not transport by motorized vehicle
 - v. Removal of items from flight path
 - 1. RCT survey requirements
 - 2. Use of “possibly radioactive” stickers

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- e. Hazardous Materials
 - i. Use and storage of hazardous materials
 - 1. Inventory of user supplied chemicals and hazardous materials
 - a. Confirm materials are noted on Experiment Safety Review Worksheet
 - b. Materials on-site for longer than 1 week must be added to ChemLog
 - 2. Store flammables in flammables cabinet when not in use
 - 3. No hazardous materials permitted in designated eating areas
 - ii. Transport of hazardous materials
 - 1. On-site – hand carry
 - 2. Off-site – require special shipping procedures and authorization
 - 3. Do not transport by motorized vehicle
- d. Waste Generation and Disposal
 - i. Minimize waste generation
 - ii. Segregate waste types
 - 1. Radioactive waste trash cans
 - 2. Disposal of hazardous waste
 - 3. No hazardous or radioactive waste in “clean” trash
- f. Electrical Equipment Checkout
 - i. UL-listed, or equivalent
 - ii. ESO evaluation of unlisted equipment
- g. Emergency procedures
 - i. Evacuate to a safe area
 - ii. Dial 911

3. USER ORIENTATION

- a. IWD Pre-job Briefing (for users not already briefed)
 - i. Review IWD
 - ii. Address any questions or issues
 - iii. User signs Part 3
 - iv. Keep signed IWD at flight path during experiment for user reference
 - v. Return Part 3 at completion of experiment
- b. Radiation Safety System (EPACS or PSS)
 - i. Walk down of flight path instrument cave
 - ii. Review of Sweep and Entry procedure
 - iii. User demonstrates Sweep Procedure
 - iv. User demonstrates Entry Procedure
- c. Other Flight Path Operations (as applicable)
 - i. Experimental setup: Collimation, absorbers, detectors, changes, etc.
 - ii. Radioactive sources and samples
 - iii. Use of laser alignment
 - iv. Fission chamber cover
 - v. Liquid nitrogen and cryogenic systems
 - vi. Electronics
- d. MPF-66 Key Usage and Responsibility
 - i. One key shared by experimenters
 - ii. Return key to flight path scientist at end of experiment

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- e. Camera Usage Policy, Notice 184
 - i. Use Group camera
 - ii. Flight Path Scientist must review photos before releasing
 - iii. Signature on OJT roster authorizes users to use Group camera
- f. Experiment Closeout and Departure
 - i. Handling equipment and materials at completion of experiment
 - 1. Parts known to have been in the beam
 - a Must be surveyed or labeled with survey-pending stickers
 - b Must be kept in a controlled area until determined releasable by an RCT survey
 - c May be shipped by Packaging & Transportation personnel as a radioactive shipment
 - 2. Parts in the flight path EPACS/PSS boundary while beam on
 - a Must be treated as radioactive until survey confirms otherwise
 - b Must be surveyed prior to release
 - c Usually releasable immediately following survey
 - 3. Parts never in the flight path EPACS/PSS boundary while beam on
 - a Do not need to be surveyed
 - b No restrictions on release
 - ii. Return of user equipment
 - 1. Provide return address
 - 2. Method of shipment and account number
 - iii. Return LANL visitor badge and dosimeters
 - 1. US Citizen
 - a Drop in badge drop-box at guard station
 - b Return to flight path scientist
 - c Return to reception desk in MPF-1
 - 2. Foreign National
 - a Return to flight path scientist
 - b Return to TA-3 Badge Office
 - c Drop in badge drop-box at guard station (not preferred)
 - iv. Stop Actual Run in User Office visitor database

On-the-Job Training Record of Completion
Nuclear Science Flight Path User Orientation

LANSCE-NS Flight Path _____

EDS course # _____

Topics Covered:

a. IWD Pre-Job Briefing

- General Flight Path IWD Pre-Job Briefing, IWD# _____

- Experiment-specific IWD Pre-Job Briefing, IWD# _____

b. Radiation Safety Systems – Sweep and Entry Procedures

c. Other Flight Path Operations

- ☐ Experimental setup: Collimation, absorbers, detectors, changes, etc.
- ☐ Radioactive sources and samples
- ☐ Use of laser alignment
- ☐ Fission chamber cover
- ☐ Liquid nitrogen and cryogenic systems
- ☐ Electronics

d. ☐ MPF-66 Key Usage and Responsibilities

e. ☐ Camera Usage Policy, Notice 184

f. Experiment Closeout and Departure

Trainer _____ Date _____

By signing below, I confirm that I have been briefed on the information in the LANSCE-NS User Checklist for the flight path listed above. I understand the requirements for use of the flight path facility, I am aware of the hazards and controls, and my questions about the information provided have been answered to my satisfaction.

Printed Name	Z#	Signature	Date